

REMARKS

Upon entry of the instant amendment, claims 1-7, 12-17 and 19-24 will remain pending in the present application.

In the instant amendment, claim 1 has been amended. Claims 11 and 18 have been cancelled without prejudice or disclaimer of the subject matter contained therein. Also, new claims 21-24 have been added.

The instant amendment made herein to the claims does not incorporate new matter into the application as originally filed. For example, new claim 21 is based on the disclosure at page 11, line 27 of the specification. New claim 22 is based on the disclosure at page 11, line 31 and Table 1 on page 15 of the specification. The lower limit "14" parts is base on Example 1 in Table 1 (i.e., 21 parts per 149.25 parts = 14 parts per 100 parts.)

Accordingly, proper consideration of each of the pending claims is respectfully requested at present, as is entry of the present amendment.

Claim Rejections under 35 U.S.C. § 103(a)

At pages 2-8 of the Office Action, claims 1-3 and 11-19 have been rejected under 35 U.S.C. § 103(a) as being obvious over "the admitted prior art" (APA) in view of Fujiki U.S. '094 (U.S. Patent No. 5,438,094), Ichikawa U.S. '495 (U.S. Patent No. 6,501,495) and Takuman EP '211 (European Published Application No. 1 225 211) (see paragraph "3." on pages 2-4 of the Office Action). Further, claims 1-7 and 11-20 have been rejected under 35 U.S.C. § 103(a) as being obvious over APA in view of Tsuji EP '702, Ichikawa U.S. '495 and Takuman EP '211 (see paragraph "4." on pages 4-8 of the Office Action).

Applicants respectfully traverse. Reconsideration and withdraw of the rejections is respectfully requested based upon the following considerations.

Non-Obviousness over the Cited References

As recited in claim 1, the present invention employs an inorganic filler (iv) which comprises an aluminum hydroxide and silica.

The Examiner states that the present invention is obvious over the combination of the cited references (the APA, Fujiki US '094, Ichikawa U.S. '495, Takuman EP '211 and Tsuji EP '702).

However, Takuman EP '211 discloses aluminum hydroxide. On the other hand, Fujiki US '094 and Tsuji EP '702 disclose alumina. It is noted that aluminum hydroxide is represented by the chemical formula Al(OH)₃ and alumina is represented by the chemical formula Al₂O₃. Thus, aluminum hydroxide is clearly distinguished from alumina since their molecular structures and crystalline structures are different from each other.

Therefore, there is no rationale for one skilled in the art to combine Fujiki US '094 or Tsuji EP '702 disclosing alumina together with either Takuman EP '211 disclosing aluminum hydroxide in an attempt to obtain the present invention.

Further, the Examiner cites the Ichikawa U.S. '495 reference which discloses use of aluminum hydroxide and metal oxide in adhesive compositions at column 10, lines 23-33.

However, in the Ichikawa U.S. '495 reference, an aluminum hydroxide and a silica are merely listed among many kinds of inorganic and organic filler, as shown below:

In order to prevent deposition of scum on the thermal head, it is possible to use inorganic or organic filler in the thermosensitive adhesive agent layer. Examples of the filler include, but are not limited to, inorganic fillers such as calcium carbonate, silica, colloidal silica, zinc oxide, titanium oxide, aluminum hydroxide, zinc hydroxide, barium sulfate, clay, kaolin, talc, alumina, surface-treated calcium carbonate and silica or the like; and organic filler such as urea-formaldehyde resin, styrene-methacrylic acid copolymer, polystyrene resin and vinylidene chloride resin or the like.

(Column 10, lines 23-33 of Ichikawa U.S. '495. Emphases added)

Thus, the Ichikawa U.S. '495 reference fails to specifically disclose or suggest the claimed combination of aluminum hydroxide and silica.

Accordingly, as explained above, all of these references fail to disclose the claimed inorganic filler (iv).

Unexpected Results

First of all, it is stated at the paragraph bridging pages 8 to 9 of the Office Action, as follows:

"In regards to the 132 Declaration, the data is not seen to constitute a conclusive showing of unexpected results. In particular, the results are not commensurate in scope with the claimed invention since the independent claim does not positively require a combination of aluminum hydroxide and silica (inorganic filler can be solely aluminum hydroxide-positively recited as such in claim 18). Table II does not provide any tests in which the inorganic filler consists of aluminum hydroxide. Thus, Table II does not provide a conclusive showing of unexpected results for the inorganic filler as recited in independent claim 1."

In the currently amended claims, the inorganic filler comprises aluminum hydroxide and silica. Therefore, upon entry of the present amendment, the unexpected, advantageous properties of the present invention are further clarified and the date of the 37 CFR § 1.132 Declaration of a co-inventor (the 132 declaration), which was enclosed with the last submission of May 5 2008, and the working Examples of the specification is commensurate in scope with the amended claims.

Although the unexcited, advantageous properties were explained in the last submission, for the Examiner's convenience, explanations regarding such properties are provided again below.

The present invention exhibits unexpected, advantageous properties. The Examples (present invention) and Comparative Examples as described in the instant specification evidence

the advantageous properties exhibited by the present invention. For example, the composition of Comparative Example 2 contains an increased amount of fumed silica (Component G) as compared with compositions of Examples 1-5 (present invention) and Comparative Example 1, but does not contain aluminum hydroxide. In Comparative Example 2, even though an increased amount of fumed silica is employed, peel strength and cohesive failure properties are poor, compared to Examples 1-5. (See Table 1 at page 15 of the instant specification). Moreover, the inflation test adhesion property is poor even if more fumed silica is employed in Comparative Example 2. On the other hand, the present invention, which employs aluminum hydroxide and silica, exhibits excellent properties with respect to peel strength, cohesive failure and inflation test adhesion.

Further, from the data in the 132 declaration, it is evidenced that the claimed invention (i.e., with aluminum hydroxide and silica) exhibits unexpected, advantageous properties even compared to experimental data in which the same amount of total inorganic filler (e.g., aluminum oxide, aluminum hydroxide and silica, but not combination of aluminum hydroxide and silica) is employed. For the Examiner's convenience, relevant data in Table I of the 132 Declaration is summarized in Table II below.

Table II

Components (pbw)	Comparative Example		Example
	3	4	1
A-1	0	0	<u>35</u>
A'-1	0	<u>35</u>	0
G	<u>56</u>	<u>21</u>	<u>21</u>
Total Amount (A-1, A'-1 and G)	<u>56</u>	<u>56</u>	<u>56</u>
Peel strength (N/cm)	2.9	3.0	6.0
Cohesive failure (%)	85	85	100
Elongation at break (%)	900	950	1100
Inflation test adhesion	NG	NG	OK

A-1 : Aluminum HydroxideA'-1 : Aluminum Oxide

G : Fumed Silica

As explained above, it is evident, from the data of the 132 Declaration and the Examples and Comparative Examples in the instant specification, that the use of aluminum hydroxide and silica as (iv) an inorganic filler, as recited in the presently amended claims, can attain excellent properties in adhesion (e.g., peel strength, cohesive failure and inflation test adhesion), as compared with the use of (fumed) silica alone or in combination with aluminum oxide (alumina).

Accordingly, even if a *prima facie* case of obviousness has been properly alleged, such obviousness has been rebutted by the evidence of unexpected, advantageous properties discussed above.

In view of the above, the present invention patentably defines over the cited references. Applicants respectfully request that the Examiner withdraw the above rejections.

New Claims

New claim 21 recites "the silica is a fumed silica."

In new claim 22, an amount of the silica is specified (i.e., 14 to 200 parts by weight).

New claim 23 recites “the inorganic filler in the addition reaction curing type silicone rubber composition consists essentially of the aluminum hydroxide powder and the silica” (emphasis added).

New claim 24 recites “the inorganic filler in the addition reaction curing type silicone rubber composition consists of the aluminum hydroxide powder and the silica” (emphasis added).

New claims 21-24 depend from claim 1. Thus, the new claims are also patentable.

CONCLUSION

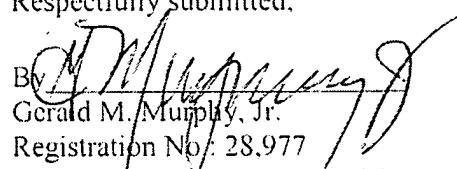
In view of the above amendment and comments, Applicants respectfully submit that the claims are in condition for allowance. A notice to such effect is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Toyohiko Konno (Reg. No. L0053) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.14; particularly, extension of time fees.

Dated: JAN 02 2009

Respectfully submitted,

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